

BUTTERFLIES ON LA PALMA

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The island of La Palma, the most westerly of the Canaries, has an area of 730 km² and rises to 2413 m at the rim of the Caldera de Taburiente, one of the largest calderas in the world. The north-east is dominated by humid laurel forest, and there are extensive forests of *Pinus canariensis* surrounding the Caldera. The whole landscape is extremely rugged and cut into by deep barrancos. In the south and west it is very arid and there is effectively a desert landscape with a xerophytic flora, many species of which are endemic to the Canary Islands or even to La Palma itself. In the south in particular there has been much recent volcanic activity. Wherever possible the land is cultivated and there is a large variety of species of introduced crops and ornamental plants.

We visited La Palma between 15 April and 19 April 1986 and recorded 15 species of butterflies, one of them apparently new to the island. We were undoubtedly too early in the season for *Pandoriana pandora* (D. & S.) and *Thymelicus acteon christi* Rebel, which have been recorded in May and June (Chandler 1979), and we did not see *Danaus plexippus* (L.) or *Lampides boeticus* (L.), both of which might have been expected. Guichard (1967) records 20 species of butterflies on La Palma. We found the following:

Pieris brassicae cheiranthi Hubner. Large white. This striking subspecies of *P. brassicae* was seen at several sites, always associated with nasturtium, *Tropaeolum majus*, an introduced South American plant which now appears to be the main larval food-plant of this species in the Canary Islands. A family of about 25 fifth instar larvae was found on nasturtium at Espindola. These were brought back to England and some of the resulting offspring were successfully crossed with English *P. b. brassicae*. *P. b. cheiranthi* females have a more yellowish upperside hindwing than those from Tenerife. This subspecies is regarded by Kudrna (1973) as a distinct species but in captivity it hybridises freely with *P. b. brassicae*. It would be of considerable interest to know if *P. b. cheiranthi* utilises the native Cruciferae or related plants or whether it has completely switched to the alien nasturtium.

Artogeia rapae (L.). Small white. Widespread in cultivation; rare in natural habitats. A single larva was found on nasturtium.

Pontia daplidice (L.). Bath white. Frequent in dry places, especially on the west side of the island.

Catopsilia florella Fabricius. African migrant. One flying

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around a *Cassia didymobotrya* bush in a garden at El Paso. This bush is the larval food-plant on Tenerife and La Gomera. *C. florella* is an extremely abundant and migratory butterfly throughout Africa south of the Sahara and it now seems well-established in the Canaries, being first recorded on Tenerife in 1964 and La Gomera in 1974 (Higgins and Riley 1983). Our record is apparently the first for La Palma.

Colias croceus (Geoffroy). Clouded yellow. Seen in most open places, especially at roadside flowers. One form *helice* noted.

Gonepteryx cleopatra palmae Stamm. Cleopatra. Two males and one female of this endemic subspecies were noted. They were rather worn, suggesting that they had hibernated. This, too, has been regarded as a distinct species confined to La Palma (Kudrna 1975).

Lycaena phlaeas phlaeas (L.). Small copper. Common, even at high elevations. All specimens closely examined were brightly coloured and showed no signs of the dark grey suffusion characteristic of certain warm localities.

Cyclurius webbianus Brullé. Canary blue. Freshly emerged in all open areas at low elevations. On Tenerife and La Gomera this Canary Island endemic is more abundant later in the season.

Zizeeria knysna knysna Trimen. African grass blue. One seen on the east side of the island. This species is abundant later in the season on Tenerife.

Aricia agestis cramera Eschscholtz. Brown argus. A few by the roadside on the west side of the island. This subspecies has also been regarded as a distinct species on the basis of the structure of the male genitalia (Higgins and Riley 1983).

Vanessa indica calliroe Hbn. Indian red admiral. Also known as *V. i. vulcania* Godart, this butterfly was seen in small numbers at many locations. Others seen were not certainly distinguished from *V. atalanta* (L.) which, however, was not positively identified on La Palma, although known to occur there.

Cynthia cardui (L.). Painted lady. Two were seen on the east side of the island, and a fourth instar larva was found feeding on an unidentified thistle at Los Sauces.

Maniola jurtina hispulla Esper. Meadow brown. Emerging in large numbers at lower elevations but evidently not yet emerged at higher elevations. The best site was flat, grassy countryside surrounding the old and abandoned airport. Meadow browns on La Palma are exceptionally large and brightly coloured, especially in the females. Many showed signs of attacks by lizards and birds, as illustrated in Fig. 1.

Pararge xiphioides Staudinger. Canary speckled wood. Not common. Well scattered around bushes and a few in pines on the slopes of the Caldera. Also seen in gardens and banana plantations and in

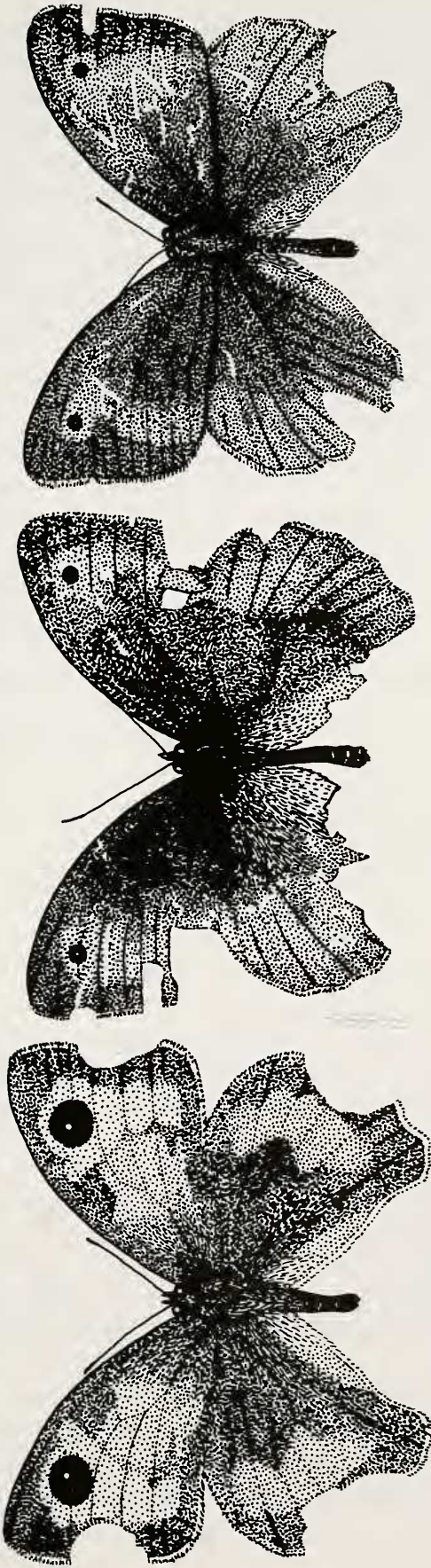


Fig. 1 Specimens of *Maniola jurtina* attacked and missed by lizards and birds. *Left*. A female showing rounded, symmetrical bites on all four wings, presumably inflicted by a lizard while the butterfly was at rest with the closed wings held well down. *Centre*. A male showing ragged, symmetrical tears on all four wings inflicted by a lizard or bird while the butterfly was at rest. *Right*. A male showing conspicuous beak marks on the fore- and hindwings, presumably made by a warbler or other small bird. The symmetrical bites in the hindwings could have been made by a lizard.

the laurel forest at Los Tilos. The best single site was a rubbish dump in the town of Santa Cruz de La Palma where seven were seen together. At Los Tilos, 17 eggs were found on the grass, *Brachypodium sylvaticum*, growing in shady laurel forest. Four of these eggs were on one blade of grass, an unusual find, two on one blade, and the remainder one to a blade. Ten first to third instar larvae were also found on *B. sylvaticum*, all singly.

Danaus chrysippus (L.) African queen. A worn male near El Time. The specimen has some white in the hindwings and so approaches the *alcippus* form of this polymorphic danaid. Form *alcippus* is the only colour form found in tropical West Africa.

Acknowledgement

We thank Derek Whiteley for drawing Fig. 1.

References

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COPRIS LUNARIS L. (COL.: SCARABAEIDAE) ON GUERNSEY — Mr. M. D. Bryan (*Ent. Rec.* **99**:58) states that he is unable to find any previous references to the occurrence, in Guernsey, of this beetle.

The species was first listed in the *Transactions of La Societe Guernesaise* by W. A. Luff in 1893. *Lunaris* was also mentioned by J. R. Tomlin who published a list of the Coleoptera recorded in the Bailiwick of Guernsey in 1921 (*Entomologist's mon. Mag.* **57**: 13 — 14). In 1966 a full list of the Coleoptera of the Bailiwick was published by H. R. Last (*Proc. Trans. S. Lond. ent. nat. Hist. Soc.* 1966, 101-115).

Very little work has been done on our local Coleoptera in recent times, but a new list is in preparation, and any records would be welcome. R. A. AUSTIN, La Societe Guernesaise, Maymyo, Les Amballes, St. Peter Port, Guernsey.